

Automation Shipping Challenge – Team Competition

Team Composition:

- Each team consists of 2 – 3 members:
 - 1 Forklift Driver
 - 1 Robotic Arm Operator
 - 1 Probbie Robot Operator
 - (In 2-member teams, the Robotic Arm Operator may also operate the Bobee Robot)
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Competition Rules:

First Leg – Forklift Driver Tasks:

1. Drive the forklift from the parking area to designated Point A and lift Pallet A (with cargo).
2. Transport Pallet A to the designated processing area and unload it. Then lift Pallet B (with cargo).
3. Transport Pallet B to the designated packaging area, unload it, and return the forklift to the parking area to complete this leg.

Second Leg – Robotic Arm Operator Tasks:

- Pick up all cargo from Pallet B and place it into the shipping preparation area.

Third Leg – Probbie Robot Operator Tasks:

- Use the Probbie Robot to push all cargo from the shipping preparation area into the final shipping area.
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Scoring Method:

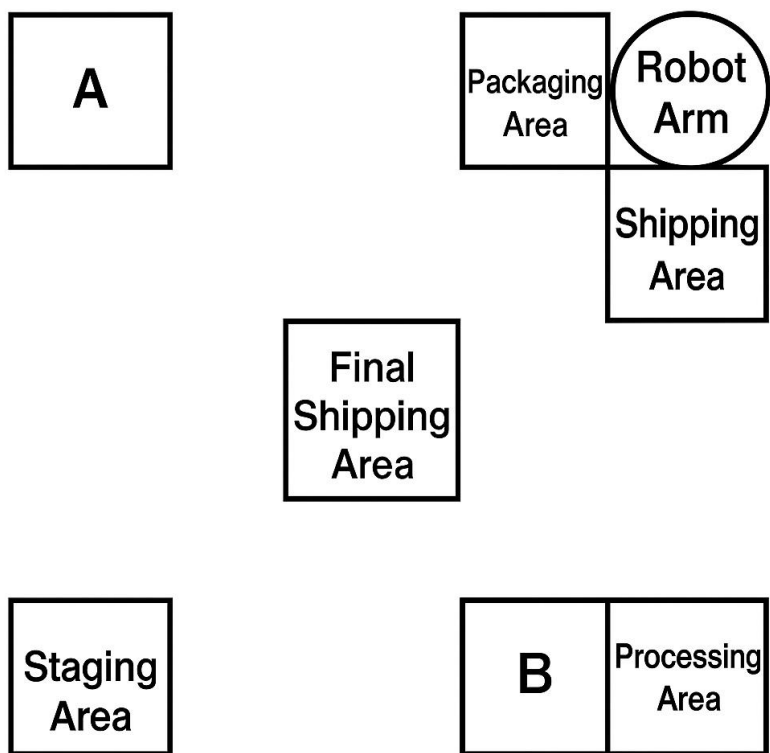
- The total time taken to complete all tasks will be used for ranking.
 - The team that completes all tasks in the shortest time will be ranked first.
 - The top three teams will win awards.
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Timing and Penalty Rules:

- Timing starts only after the referee's instruction. Starting early results in one warning; second offense adds 10 seconds.
 - Teams must wait for the referee's signal to proceed to the next leg; otherwise, add 5 seconds.
 - If cargo drops during forklift movement, the Probbie Robot must be used to retrieve it. The forklift must remain still during this process. Violations add 5 seconds.
 - No time penalties for dropped cargo, but the timer will not pause.
 - If cargo is dropped outside the packaging or shipping area by the robotic arm, the referee will return the cargo and add 5 seconds.
 - Forklift, robotic arm, robot, pallets, and cargo must remain within designated boundaries; adds 5 seconds.
 - No personnel changes allowed after the competition begins. Unauthorized assistance adds 10 seconds.
 - Teams failing to complete all tasks will be disqualified.
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Notes:

- Each team will have **one 30-second trial session** before the match.
- All pallets and cargo modules will be provided by the organizer.
- Teams must bring their own forklift, robotic arm, and Probbie robot.



(The competition layout diagram is for reference only; the actual setup may vary on the event day.)